



Launch Mission Execution Forecast

Mission: Falcon 9 NASA Crew-1

Issued: 12 Nov 2020 / 0800L (1300Z)

Valid: 14 Nov 2020 / 1944 – 1954L (15/0044 – 0054Z)



Forecast Discussion: Tropical Storm Eta has made landfall just south of Cedar Key, Florida. Eta will accelerate northeastward today and exit Florida near Jacksonville shortly after noon as it merges with a mid-latitude system along the Eastern Seaboard. Conditions will gradually improve through the day across the Space Coast, with rain chances and winds dropping off significantly after sunset. On Friday, a weak frontal boundary will push through the Spaceport, clearing away much of the cloud cover and turning winds northerly. This boundary will likely begin moving back northward on Saturday as winds become easterly, developing a few showers. The primary launch weather concern Saturday evening will be the cumulus clouds and showers along the boundary.

On Sunday, conditions remain much the same as the next frontal system moves into the Southeastern U.S., adding instability to the stalled boundary over Central Florida. The primary launch weather concerns for Sunday remain the showers and cumulus clouds associated with the boundary.

Launch Day	Probability of Violating Weather Constraints							
	30%	Primary Concerns: Cumulus Cloud Rule, Flight Through Precipitation						
	Weather Conditions					Additional Risk Criteria		
	Weather/Visibility:	Isold. Showers / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
	Temp/Humidity:	78°F / 82%	Cumulus	Scattered	3,000	8,000	Booster Recovery Weather:	Moderate
	Liftoff Winds (200'):	080° 12 - 17 mph					Solar Activity:	Low
24-Hour Delay	Probability of Violating Weather Constraints							
	40%	Primary Concerns: Cumulus Cloud Rule, Flight Through Precipitation						
	Weather Conditions					Additional Risk Criteria		
	Weather/Visibility:	Isold. Showers / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
	Temp/Humidity:	77°F / 85%	Cumulus	Broken	3,000	12,000	Booster Recovery Weather:	Low
	Liftoff Winds (200'):	130° 7 - 12 mph					Solar Activity:	Low
Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.								
Next Forecast Will Be Issued		13 Nov 2020						